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## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

## 1.-15. (Cancelled)

16. (Currently Amended) A tetracycline compound of formula (III):

wherein:

J<sup>5</sup> and J<sup>6</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, sulfonyl, acyl, alkoxycarbonyl, alkaminocarbonyl, alkaminothiocarbonyl, substituted thiocarbonyl, substituted carbonyl, alkoxythiocarbonyl, or linked to form a ring;

J<sup>7</sup> and J<sup>8</sup> are each alkyl, halogen, or hydrogen;

X is  $CHC(R^{13}Y'Y)$ ,  $CR^{6'}R^{6}$ ,  $C=CR^{6'}R^{6}$ , S,  $NR^{6}$ , or O;

R<sup>2</sup>, R<sup>2</sup>, R<sup>4</sup>, and R<sup>4</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R<sup>4</sup> is NR<sup>4</sup>'R<sup>4</sup>", alkyl, alkenyl, alkynyl, aryl, hydroxyl, halogen, or hydrogen;

 $\mathbb{R}^{\frac{2^{2}}{5}}$ ,  $\mathbb{R}^{3}$ ,  $\mathbb{R}^{10}$ ,  $\mathbb{R}^{11}$  and  $\mathbb{R}^{12}$  are each hydrogen or a pro-drug moiety;

R<sup>5</sup> is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaroyl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carbonyloxy, or aryl carbonyloxy;

R<sup>6</sup> and R<sup>6</sup> are each independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R<sup>7</sup> is hydrogen, nitro, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, thionitroso, or -(CH<sub>2</sub>)<sub>0</sub>.

3NR<sup>7c</sup>C(=W')WR<sup>7a</sup>;

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W is CR<sup>7d</sup>R<sup>7e</sup>, S, NR<sup>7b</sup> or O;

W' is O, S, or NR<sup>7f</sup>;

R<sup>7a</sup>, R<sup>7b</sup>, R<sup>7c</sup>, R<sup>7d</sup>, and R<sup>7e</sup> are each independently hydrogen, acyl, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R<sup>8</sup> is hydrogen, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R<sup>13</sup> is hydrogen, hydroxy, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl; and

Y' and Y are each independently hydrogen, halogen, hydroxyl, cyano, sulfhydryl, amino, alkyl, alkenyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl, and pharmaceutically acceptable salts thereof.

- 17. (Original) The tetracycline compound of claim 16, wherein  $R^4$  is  $NR^4$ ' $R^4$ ", X is  $CR^6R^6$ ';  $R^2$ ,  $R^2$ ',  $R^6$ ,  $R^6$ ',  $R^8$ ,  $R^{10}$ ,  $R^{11}$ , and  $R^{12}$  are each hydrogen;  $R^4$ ' and  $R^4$ " are lower alkyl; and  $R^5$  is hydroxy or hydrogen.
- 18. (Original) The tetracycline compound of claim 17, wherein  $R^{4}$  and  $R^{4}$  are each methyl and  $R^{5}$  is hydrogen.
- 19. (Original) The tetracycline compound of claim 16, wherein  $J^7$  and  $J^8$  are hydrogen.
- 20. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> is substituted or unsubstituted alkyl.
- 21. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> is sulfonyl.
- 22. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> and J<sup>6</sup> are linked to form a ring.
- 23. (Original) The tetracycline compound of claim 16, wherein  $J^5$  is heteroaryl.
- 24. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> is substituted carbonyl.

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25. (Currently Amended) The tetracycline compound of claim 16, wherein said compound is selected from the group consisting of:

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wherein

R is substituted or unsubstituted alkyl, alkenyl, alkynyl, halogen, alkoxy; and Y is N, O, or S, or pharmaceutically acceptable salts or prodrugs thereof.

26. (Currently Amended) A tetracycline compound selected from the following: of Table 1,

OH OH OH	OH O OH O OH	OH OH OH OH
DH OH OH	F H OH OH OH OH	H H OH OH OH OH
F OH O OH O OH	NH OH OH OH	OH O OH OH OH NH2
$\begin{array}{c c} & & & \\ &$	CI H OH OH NH2	H OH OH OH
$\begin{array}{c c} & & & \\ &$	F H H OH NH2	F H H H H H H H H H H H H H H H H H H H
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	H CHA SH P	H <sub>2</sub> N OH OH OH OH
H H N OH NH2	OH O OH O OH ONH2	$\begin{array}{c c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\$
HN OH OH OH	OH OH OH NH2	$\begin{array}{c c} & & & \\ & & & \\$
H H H OH NH2	$\begin{array}{c c} H_2N & \begin{array}{c} H & H \\ \hline \end{array} \\ \begin{array}{c} H \\ \hline \end{array} \\ \begin{array}{c} OH \\ OH \end{array} \\ \begin{array}{c} OH \\ OH \end{array} \\ \end{array} \\ \begin{array}{c} OH \\ OH \end{array}$	$\begin{array}{c c} & & & \\ & & & \\$
H H H OH NH2	OH O OH O OH O	H H H OH

H OH OHO OHO O	OH OH OH OH	H H H H H H H H H H H H H H H H H H H
OH OH OH		H H OH OH OH
H H H CH	F F OH OHO OHO OHO	H H H H NH2
H H OH NH2	HO OH OH NH2	OH OH OH OH NH2
OH OH OH NH2	HO	OH OHO NHO
NH OH OHO OH	H H OH NH2	$\begin{array}{c c} & & & \\ & & & \\ & & & \\ & &$
H H OH OH OH OH	NH NH2	F N OH OH NH2
H H OH NH2	F OH OH OH OH	N H H N OH NH2
F N N OH OH OH NHE	H <sub>2</sub> N OH O OH O OH NH	F H H H OH NH2

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or a pharmaceutically acceptable salt thereof.

- 27. (Currently Amended) A pharmaceutical composition comprising an effective amount of a tetracycline compound of any one of claims 1, 15, 16, 25 or 26, and a pharmaceutically acceptable carrier.
- 28. (Original) The pharmaceutical composition of claim 27, wherein said effective amount is effective to treat a tetracycline responsive state.
- 29.-41. (Cancelled)
- 42. (New) The compound of claim 16, wherein R<sup>7</sup> is dialkylamino.
- 43. (New) The compound of claim 42, wherein R<sup>7</sup> is dimethylamino.
- 44. (New) The compound of claim 16 or 24, wherein J<sup>6</sup> is alkyl.

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## 45. (New) The compound of claim 44, wherein said compound is